

## III. CLAIM AMENDMENTS

1. (Currently Amended) A white balance measurement unit for measuring the respective intensities of at least two light components, said light components having predetermined frequency bands, wherein said white balance measurement unit comprises at least one LED, said LED being reversed biased and adapted that has a response to a to respond to one of said predetermined frequency bands corresponding to of one of said light components received by said LED, said LED being further ~~and which is arranged~~ to generate an electronic measurement signal representative of the intensity of said one of said light components.

2. (Currently Amended) A white balance measurement unit according to claim 1, the unit comprising at least one dedicated LED for each one of said at least two light components, each dedicated LED ~~having a response~~ adapted to respond to a predetermined frequency band corresponding to one of said light components received by said LEDs and being arranged to generate an electronic measurement signal representative of the intensity of said one of said light components.

3. (Cancelled)

4. (Currently Amended) A white balance measurement unit adjustment device according to ~~claim 3~~ claim 1, the device comprising:

- an input for receiving at least two electronic colour

- signals each corresponding to one of said light components,  
and  
- an adjusting means for adjusting proportional strength of  
said colour signals corresponding to said electronic  
measurement signals.

5. (Currently Amended) A white balance measurement unit  
~~adjustment device~~ according to ~~claim 3~~ claim 1, wherein the  
device has means for controlling an electrical image signal  
using the electronic measurement signal.

6. (Currently Amended) A white balance measurement unit  
~~adjustment device~~ according to ~~claim 3~~ claim 1, wherein the  
device comprises at least one LED that is arranged to be used  
both for white balance adjustment and for exposure control.

7. (Currently Amended) A recording device for recording an  
image in an electronic form including a white balance  
adjustment device comprising a white balance measurement unit  
for measuring the respective intensities of at least two light  
components, said light components having predetermined  
frequency bands,, wherein said white balance measurement unit  
comprises at least one LED, said LED being reversed biased and  
adapted that has a response to a to respond to one of said  
predetermined frequency bands corresponding to of one of said  
light components and received by said LED, said LED being  
further which is arranged to generate an electronic  
measurement signal representative of the intensity of said one  
of said light components.

8. (Previously Presented) A recording device according to  
claim 7, wherein the recording device is arranged to adjust

balance of at least two colour components of a captured electronic image on the basis of the measured intensities of at least two light components.

9. (Previously Presented) A recording device according to claim 7, wherein said device is selected from a group comprising: a digital camera, a video camera, a digital video camera, a TV-camera and a mobile station.

10. (Original) A recording device according to claim 7, wherein at least one LED is arranged to generate an electronic measurement signal at a certain time and to generate light at another time.

11. (Original) A recording device according to claim 7, comprising a mobile telephone.

12. (Currently Amended) A method for white balance measurement adjustment comprising measuring the respective intensities of at least two light components, the method comprising measuring the intensity of at least one of said light components using an LED comprising the steps of: ~~that reverse biasing said LED,~~ adapting said LED to receive said light components, selecting an LED that responds to ~~has a response to~~ a predetermined frequency band corresponding to said light component received by said LED, and ~~which is arranged~~ arranging said LED to generate an electronic measurement signal in response to said received light component, said electronic measurement signal representative of the intensity of said one of said light components.

13. (Currently Amended) A method for white balance adjustment comprising:

- recording an electronic image comprising at least two colour components,
- measuring the respective intensities of at least two light components, and

- adjusting the balance of said at least at least two colour components of the electronic image on the basis of the measured intensities of said at least two light components, wherein measurement of the intensity of at least one of said at least two light components is performed using an LED and further wherein said measurement comprises: reverse biasing said LED, adapting said LED to receive said light components, selecting an LED that responds to a predetermined frequency band corresponding to said light component received by said LED, and arranging said LED to generate an electronic measurement signal in response to said received light component, said electronic measurement signal representative of the intensity of said one of said light components.

~~that has a response to a predetermined frequency band corresponding to one of said at least two light components and which is arranged to generate an electronic measurement signal representative of the intensity of said one of said at least two light components.~~

14. (Currently Amended) A white balance adjustment device including a white balance measurement unit, the white balance measurement unit for measuring the respective intensities of at least two light components, said light components having predetermined frequency bands, wherein said white balance

measurement unit comprises at least one LED, said LED being reversed biased and adapted that has a response to a to respond to one of said predetermined frequency bands corresponding to of one of said light components received by said LED, said LED being further and which is arranged to generate an electronic measurement signal representative of the intensity of said one of said light components.

15. (Currently Amended) A digital camera including a white balance measurement unit, the white balance measurement unit for measuring the respective intensities of at least two light components, said light components having predetermined frequency bands, wherein said white balance measurement unit comprises at least one LED, said LED being reversed biased and adapted that has a response to to respond to one of said predetermined frequency band corresponding to of one of said light components received by said LED, said LED being further and which is arranged to generate an electronic measurement signal representative of the intensity of said one of said light components.

16. (Currently Amended) A video camera including a white balance measurement unit, the white balance measurement unit for measuring the respective intensities of at least two light components, said light components having predetermined frequency bands, wherein said white balance measurement unit comprises at least one LED, said LED being reversed biased and adapted that has a response to to respond to one of said predetermined frequency bands of one of said light components received by said LED, said LED being further and which is arranged to generate an electronic measurement signal

representative of the intensity of said one of said light components.

17. (Currently Amended) A digital video camera including a white balance measurement unit, the white balance measurement unit for measuring the respective intensities of at least two light components, said light components having predetermined frequency bands, wherein said white balance measurement unit comprises at least one LED, said LED being reversed biased and adapted that has a response to respond to one of said to a predetermined frequency bands corresponding to of one of said light components received by said LED, said LED being further ~~and which is~~ arranged to generate an electronic measurement signal representative of the intensity of said one of said light components.

18. (Currently Amended) A television camera including a white balance measurement unit, the white balance measurement unit for measuring the respective intensities of at least two light components, said light components having predetermined frequency bands, wherein said white balance measurement unit comprises at least one LED, said LED being reversed biased and adapted that has a response to a to respond to one of said predetermined frequency bands corresponding to of one of said light components received by said LED, said LED being further ~~and which is~~ arranged to generate an electronic measurement signal representative of the intensity of said one of said light components.

19. (Currently Amended) A mobile station including a white balance measurement unit, the white balance measurement unit for measuring the respective intensities of at least two light

components, said light components having predetermined frequency bands, wherein said white balance measurement unit comprises at least one LED, said LED being reversed biased and adapted that has a response to to respond to one of said a predetermined frequency bands corresponding to of one of said light components received by said LED, said LED being further and which is arranged to generate an electronic measurement signal representative of the intensity of said one of said light components.

20. (Currently Amended) A mobile telephone including a white balance measurement unit, the white balance measurement unit for measuring the respective intensities of at least two light components, said light components having predetermined frequency bands, wherein said white balance measurement unit comprises at least one LED, said LED being reversed biased and adapted that has a response to to respond to one of said a predetermined frequency bands corresponding to of one of said light components received by said LED, said LED being further and which is arranged to generate an electronic measurement signal representative of the intensity of said one of said light components.

21. (Currently Amended) A white balance measurement unit according to claim 1, wherein said at least one LED is arranged ~~to be reverse biased by the application of a voltage source and so that~~ the electronic measurement signal is arranged ~~to be generated~~ by a current that flows in the LED when connected in reverse bias.

~~21~~22. (Currently Amended) A white balance measurement unit according to claim 1, wherein said at least one LED is

connected in series with a resistor and arranged to be reverse biased by the application of a voltage across the series connection of the LED and resistor and the electronic measurement signal is arranged to be generated as a voltage measurement across the resistor.

2223. (Currently Amended) A white balance measurement unit according to claim 2, comprising two LEDs one having a response to blue light and being arranged to generate an electronic measurement signal representative of the intensity of a blue light component, the other having a response to red light and being arranged to generate an electronic measurement signal representative of the intensity of a red light component.

2324. (Currently Amended) A white balance measurement unit according to claim 1 further comprising an LED with a response to a light component whose intensity correlates with a total intensity of light and being arranged to generate an electronic measurement signal representative of the total intensity of light.

2425. (Currently Amended) A white balance measurement unit according to claim ~~2324~~, wherein the LED has a response to green light.

2526. (Currently Amended) A white balance measurement unit according to claim 1, wherein said at least one LED is arranged to generate an electronic measurement signal representative of the intensity of a light component in a first frequency band and to radiate light in a second frequency band different from the first frequency band.



2627. (Currently Amended) A white balance measurement unit according to claim 1, wherein said at least one LED is a discrete LED component.

2728. (Currently Amended) A white balance measurement unit according to claim 1, wherein said at least one LED is part of an integrated circuit.

2829. (Currently Amended) A white balance measurement unit according to claim 1, wherein said at least one LED is integrated onto a printed circuit board.

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